

WHAT IS CLAIMED IS

1. Portable electronic apparatus for displaying a piece of information in an analogue manner, by means of two hands driven independently by two stepping motors said piece of information being represented on the dial via a plurality of markings  $R_i$ , said apparatus including:

- 5           - at least one information storing unit  
            - a unit for processing said information;  
            - a management and control unit receiving control signals from the processing unit  
            - a supply unit controlled by said management unit, and controlling the  
10 movement of said two stepping motors  
            - an external control member enabling at least said piece of information to be displayed,

wherein said processing unit is provided with an algorithm or a correspondence table between a marking  $R_i$ , located in any position on the dial and angles  $\alpha_i$   $\beta_i$  formed  
15 respectively by each hand from a measurement reference and in that the shape of said hands is such that when they have the angular orientations  $\alpha_i$   $\beta_i$ , their elongated parts can intersect above said marking  $R_i$ , or their tips can be aligned opposite said marking  $R_i$ .

2. Apparatus according to claim 1, wherein at least one hand is bent and  
20 delimits in rotation a small central circle comprising no markings  $R_i$ .

3. Apparatus according to claim 1, wherein at least one hand has a curved shape with a radius of curvature decreasing towards the centre of rotation of said hand.

4. Apparatus according to claim 3, wherein one hand is rectilinear and the  
25 other hand (16) is heart-shaped, one branch of said other hand being active.

5. Apparatus according to claim 1, wherein both hands are made of translucent material in two different colours .

6. Apparatus according to claim 5, wherein a given value of an angle  $\alpha$  or  $\beta$  corresponds to a determined number of steps of a stepping motor.

30       7. Apparatus according to claim 1, wherein the alignment of the tips of both hands corresponds to markings  $R_i$  borne by the dial at its periphery.

8. Apparatus according to claim 1, wherein it further includes a time base supplying control signals to said management and control unit for displaying a first  
time related piece of information via said hand in connection with symbols provided at  
35 the periphery of the dial .

5           9. Apparatus according to claim 8, wherein said measurement reference for angles  $\alpha$  and  $\beta$  is the time reference at 12 o'clock, said angles  $\alpha$  and  $\beta$  being measured between the time reference and a radius passing through the rotational axis of said hands and through their tip.

10           10. Apparatus according to claim 8, wherein said time keeping circuit includes a calendar for the months and the dates, said calendar forming said storing unit for a second time related piece of information, and in that the markings  $R_i$  are formed of the twelve months of the year and by the numbers from 1 to 31, the first twelve numbers corresponding to the hour-symbols.

15           11. Apparatus according to claim 8, wherein an optical valve is placed above the dial for masking the markings  $R_i$  with the exception of the hour-symbols when the apparatus is in current time reading mode.

20           12. Apparatus according to claim 1 or 8, wherein said storing unit contains the letters of the alphabet, corresponding to 26 marks distributed randomly on the dial and in that said management and control unit is arranged so as to make a random selection of said letters from the storing unit

            13. Apparatus according to claim 12, wherein it includes two storing units , one for the vowels and one for the consonants, each storing unit being able to be selected by an appropriate manipulation of the external control member

25           14. Apparatus according to claim 12, wherein it further includes an electronic dictionary that can be consulted on the basis of the letters selected from the storing unit.

30           15. Apparatus according to claim 8 or 12, wherein it is a wristwatch able to permanently give a first time related piece of information and, upon actuation of the external control member, a second time related or non time related piece of information.